



Aquacultured Native Oysters Reach Market Size in Record Time

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Sterile native oysters hold great commercial potential

Thousands of native Chesapeake Bay oysters raised in the York River are thriving and have grown to market size (3-4 inches) in just 14 months, according to Chesapeake Bay Foundation's (CBF) Oyster Aquaculture Manager Tommy Leggett. The oysters, a sterile strain bred to be tolerant of diseases typically devastating to native oysters, have a survival rate of 94%.

"The growth performance of these oysters holds great potential for the commercial aquaculture of native oysters in the Chesapeake Bay," Leggett said. Testing for even longer-term survival is ongoing, he noted.

Once part of profitable seafood industry in Virginia and Maryland, the Chesapeake Bay oyster population is today less than 2% of historic levels, devastated over the past century by overharvesting, loss of reef habitat, pollution and, in recent decades, two diseases that kill most native oysters before they reach market size. Development of a disease-tolerant native oyster that thrives and can be commercially harvested has been the focus of intense academic research.

The 10,000 oysters raised by Leggett in the York River are the sterile offspring of two disease tolerant strains developed by the Virginia Institute of Marine Science. They were grown from half-inch seed in mesh bags placed on racks just above the river's bottom in August 2003. In October 2004, nearly 6000 of the oysters were already market size. The typical growth rate of native oysters is about one inch per year.

Leggett reports the mortality rate of these sterile oysters has been insignificant. Fertile native oysters grown in the same area appear to have a higher mortality rate, and fewer have reached market size. The sterile oysters may exhibit faster growth and more disease resistance because they are putting energy into growth and immune systems rather than reproduction, Leggett speculated.

"Clearly more research is needed, but these results suggest there may be a potential application for commercial oyster planters to use sterile native oysters for on-bottom grow out in much the same way private planters anticipate using non-native oysters," Leggett said.